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09386183 BA

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Artifact Type Code: S

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Stapled Set(s) Color Documents or B/W Photographs

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Microfilm(s)

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ORIGINAL RECORD
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Patent No
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The United States of America



The Commissioner of Patents and Trademarks

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America for the term set forth below, subject to the payment of maintenance fees as provided by law.

If this application was filed prior to June 8, 1995, the term of this patent is the longer of seventeen years from the date of grant of this patent or twenty years from the earliest effective U.S. filing date of the application, subject to any statutory extension.

If this application was filed on or after June 8, 1995, the term of this patent is twenty years from the U.S. filing date, subject to any statutory extension. If the application contains a specific reference to an earlier filed application or applications under 35 U.S.C. 120, 121 or 365(c), the term of the patent is twenty years from the date on which the earliest application was filed, subject to any statutory extension.

Bence Lehman

Commissioner of Patents and Trademarks

Allie M. Person

Attest



US005793444A

United States Patent [19][11] **Patent Number:** 5,793,444

Ro

[45] **Date of Patent:** Aug. 11, 1998**[54] AUDIO AND VIDEO SIGNAL RECORDING AND REPRODUCTION APPARATUS AND METHOD****[75] Inventor:** Se Yong Ro, Seoul, Rep. of Korea**[73] Assignee:** LG Electronics Inc., Seoul, Rep. of Korea**[21] Appl. No.:** 498,585**[22] Filed:** Jul. 6, 1995**[30] Foreign Application Priority Data**

Jul. 6, 1994 [KR] Rep. of Korea 1994 16190

[51] Int. Cl.⁶ H04N 5/765**[52] U.S. Cl.** 348/714; 364/48; 386/96; 386/117; 386/118**[58] Field of Search** 348/231, 232, 348/233, 714, 718, 719, 426; 358/335, 341, 342, 343, 906, 909; 369/32, 47, 48, 54; 360/2, 19.1, 32; 395/200.08, 889, 442; 386/1, 4, 52, 64, 46, 96, 107, 117, 118, 38; H04N 5/765**[56] References Cited****U.S. PATENT DOCUMENTS**

4,901,160 2/1990 Kinoshita et al. 358/906

5,153,730 10/1992 Nagasaki et al. 348/231
 5,488,409 1/1996 Yaea et al. 348/5
 5,497,193 3/1996 Mitsuhashi et al. 348/231
 5,497,194 3/1996 Sakagami et al. 386/107
 5,511,000 4/1996 Kaloi et al. 395/2.1
 5,511,054 4/1996 Oishi et al. 360/19.1
 5,581,360 12/1996 Matsumura et al. 386/46

Primary Examiner—John K. Peng*Assistant Examiner*—Jeffrey S. Murrell*Attorney, Agent, or Firm*—John P. White**[57]****ABSTRACT**

An audio and video recording and reproduction apparatus and method is described, which uses a movable storage memory such as a memory card, so that audio and video signals are easily accessed without separate editing devices. The apparatus uses a separable memory so that a deck is unnecessary, allowing small, lightweight constructions, and a compression algorithm results in longer playing time, while read/write operations robust to noise are achieved. Also, data desired by the user is easily accessible, and applications as a substitute for magnetic or disk media are also possible.

13 Claims, 4 Drawing Sheets